IAP15 Rec'd PCT/PTO 0 9 MAR 2007

ATTORNEY DOCKET NO. 70279USPCT



AR 0 9 2007)
IN RE ALTICATION OF

CONFIRMATION NO: 7419

Christopher Pleines

APPLICATION NO: 10/582,696

INTERNATIONAL APPLICATION NO: PCT/EP2005/00877

INTERNATIONAL FILING DATE: January 28, 2005

FOR: IMPROVED FERTILITY RESTORATION FOR OGURA

CYTOPLASMIC MALE STERILE BRASSICA AND METHOD

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

Sir:

The Notification of Missing Requirements under 35 U.S.C. 371 in the United States Designated/Elected Office (DO/EO/US) dated February 12, 2007 (a copy of which is enclosed) has a shortened statutory time set to expire on April 12, 2007.

In response, applicants submit herewith an original executed Declaration of the inventors. Please charge Applicants' credit card for the \$130 surcharge fee under 37 CFR 1.492(h). A credit card payment form is enclosed for processing.

Applicants also submit a paper copy of the substitute Sequence Listing, a computer readable form of the substitute Sequence Listing on disk, and a Statement Verifying the Identity of Above Copies in compliance with 37 C.F.R. § 1.821-1.825. A copy of the Report is enclosed.

On FC:1617

130.00 OP

The Commissioner is hereby authorized to charge any additional fees under 37 CFR §1.17 which may be required, or credit any overpayment, to Account No. 50-1744 in the name of Syngenta Biotechnology Inc.

Respectfully submitted,

Syngenta Biotechnology Inc. Patent Department P.O. Box 12257 Research Triangle Park, NC 27709-2257

Date: March 7, 2007

Bruce Vrana

Attorney for Applicants Reg. No. 38,672 Telephone: 919-541-8614



FILING BY "FIRST CLASS MAIL" UNDER 37 C.F.R. § 1.8

I hereby certify that the following correspondence is being deposited with the United States Postal Service as "First Class Mail" with proper postage in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 7, 2007.

- Response to Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office (DO/EO/US)
- Copy of Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office (DO/EO/US) dated February 12, 2007
- 3) Copy of the Raw Sequence Listing Error Report
- 4) Declaration for Utility or Design Patent Application (37 CFR 1.63) (2 total)
- 5) Power of Attorney or Authorization of Agent (2 total)
- 6) Submission of Substitute Sequence Listing Including Statement of Verification
- 7) Paper Copy of the Substitute Sequence Listing (9 pages total)
- 8) Computer Readable Form of the Substitute Sequence Listing
- 9) Credit Card Payment Form
- 10) Return Postcard

Melissa Hardy	
Name	,
MdinHac	dy
Signature	1

PRIORITY DATE

01/30/2004



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Viginia 22313-1450 www.uspto.gov

I.A. FILING DATE

01/28/2005

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO. 10/582,696 Stephan Christopher Pleines 70279USPCT INTERNATIONAL APPLICATION NO. PCT/EP05/00877

22847 SYNGENTA BIOTECHNOLOGY, INC. PATENT DEPARTMENT 3054 CORNWALLIS ROAD P.O. BOX 12257

RESEARCH TRIANGLE PARK, NC 27709-2257

CONFIRMATION NO. 7419 371 FORMALITIES LETTER

pue: 4/12/0/

Date Mailed: 02/12/2007

MOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 06/13/2006
- Copy of the International Search Report filed on 06/13/2006
- Preliminary Amendments filed on 06/13/2006
- Information Disclosure Statements filed on 12/12/2006
- Biochemical Sequence Diskette filed on 06/13/2006
- Biochemical Sequence Listing filed on 06/13/2006
- Request for Immediate Examination filed on 06/13/2006
- U.S. Basic National Fees filed on 06/13/2006
- Priority Documents filed on 06/13/2006

The applicant needs to satisfy supplemental fees problems indicated below.

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$130 for a Large Entity:

- \$130 Surcharge.
 - The paper or compact disc copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e). Applicant must provide a substitute paper or compact disc copy of the "Sequence Listing", as well as an amendment specifically directing its entry into the application OR a substitute computer readable form (CRF) copy of the "Sequence Listing". These two items must be the same. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web. https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

MAMIE P PERSON

Telephone: (703) 308-9140 EXT 227

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/582,696	PCT/EP05/00877	70279USPCT

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/10/06



IFWP

RAW SEQUENCE LISTING

DATE: 06/22/2006

PATENT APPLICATION: US/10/582,696

TIME: 12:42:24

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\06222006\J582696.raw

- 3 <110> APPLICANT: Syngenta Participations AG
- 5 <120> TITLE OF INVENTION: IMPROVED FERTILITY RESTORATION FOR OGURA

CYTOPLASMIC MALE STERILE

- BRASSICA AND METHOD
- W--> 7 <130> FILE REFERENCE: 70279WOPCT
- C--> 8 <140> CURRENT APPLICATION NUMBER: US/10/582,696
- C--> 8 <141> CURRENT FILING DATE: 2006-06-13
 - 8 <150> PRIOR APPLICATION NUMBER: GB 0402106.9
 - 9 <151> PRIOR FILING DATE: 2004-01-30
 - 11 <160> NUMBER OF SEQ ID NOS: 41
 - 12 <170> SOFTWARE: PatentIn version 3.1

Does Not Comply

Corrected/Diskette Needed

used to

Cheate Submitted

ERRORED SEQUENCES

- Patent-IN SOFTWARE WAS

- E--> 14 <210> SEQ ID NO: 1<211> 20<212> DNA<213> Artificial Sequence
- W--> 15 <220> FEATURE: <223> Primer 1127 16 <222> LOCATION: (1)..(20)
- B--> 17 <211> LENGTH:
- E--> 17 <212> TYPE:
- E--> 17 <213> ORGANISM:
- W--> 17 <400> SEQUENCE: 1
 - 18 ggggaaggaa ggaaggactc
- E--> 21 <210> SEQ ID NO: 2<211> 21<212> DNA<213> Artificial Sequence
- W--> 22 <220> FEATURE: <223> Primer 1128
- 23 <222> LOCATION: (1)..(21)
- E--> 24 <211> LENGTH: B--> 24 <212> TYPE:
- E--> 24 <213> ORGANISM:
- W--> 24 <400> SEQUENCE: 2
- 25 tcaggttcac acagcagcat a
- E--> 28 <210> SEQ ID NO: 3<211> 20<212> DNA<213> Artificial Sequence
- W--> 29 <220> FEATURE: <223> Primer 1135
- B--> 31 <211> LENGTH:
- E--> 31 <212> TYPE:
- E--> 31 <213> ORGANISM:
 - 31 <400> SEQUENCE: 3
 - 32 ataggttcct ggcagagatg
- E--> 35 <210> SEQ ID NO: 4<211> 20<212> DNA<213> Artificial Sequence
- W--> 36 <220> FEATURE: <223> Primer 1136
- B--> 38 <211> LENGTH:
- E--> 38 <212> TYPE:
- E--> 38 <213> ORGANISM:
 - 38 <400> SEQUENCE: 4

PIS contact

Mark

Spencer

at

571-272-2510.

(Sample sequence listing) p1

	<110>	Smith, Jo	hn; Smithger	ne Inc.					
						•	•		•
	<120>	Example o	f a Sequence	Listing	•				
	•	•							
	<130>	01-00001			<i>:</i>				
	<140> <141>	PCT/EP98/0 1998-12-31		:		•			
					•	and the same of th			
	<150>	us 08/999,	999		•	• .			
	<151>	1997-10-15							
•		•					•		
	<160>	4							
	<170>	PatentIn v	ersion 2.0		•		•		
	~210-	•		•		•			
	<210> <211>	1 389				•	•		
•	<212>	DNA							
	<213>	Paramecium	sp.						
•	-220:	•			•				
	<220> <221>	CDS	·				•	•	
	<222>	(279)(3	89)			• •			
	<300>			•					
	<301>	Doe, Richar	rd			•	•		
	<302>	Isolation a	and Character	ization of a	Gene Encodi	ng a			
•	<303>	Journal of	rom Parameciu Genes	ım sp.					
	<304>	1	Jee5						
	<305>	4			•				
	<306> <307>	1-7 1988-06-31	. •			•			
	<308>	123456			:	•	•		
	<309>	1988-06-31			•			• •	i
	<400>	1				•		•	
-	agctgtagtc	attectgtgt	cetețtetet	ctgggcttct	caccctgcta	atcagatete	60		
	agggagagtg	tcttgaccct	cctctgcctt	F00306FF68					
		ccregacece	ccccgcccc	tgcagcttca	caggcaggca	ggcaggcagc	120 :		
:	: tgatgtggca	attgctggca	gtgccacagg	cttttcagcc	aggettaggg	tgggttccgc	180 .		
					- 55	- agg c c c c g c	100 .		
•	cgcggcgcgg	cggcccctct	cgcgctcctc	tegegeetet	ctctcgctct	CCTCTCGCTC	240		
						•			• .
						•			
•				•					•
•	•	•							
	•								
						<i>:</i>			
	,								
								•	
						•	•		
•		-	- 4	<u>-</u> .		-	:		
									4

```
atg
                                                                     gtt
 ggacctgatt aggtgagcag
                               gaggagggg
                                             cagttagc
                                                                           tca
                                                                                             agc
                                                              Met
                                                                     Val
                                                                           Ser
                                                                                 Met
                                                                                       Phe
                                                                    gtt
Val
       tct
                                cct
                                                              ttt
                                                                                       ttc
 ttg
                          tgg
                                      gga
                                                                                             caa
                                                                                                   344
                   Lys
10
                                                  Cys
15
       Ser
             Phe
                          Trp
                                      Gly
                                            Phe
                                                        Leu
                                                              Phe
                                                                           Cys
                                                                                 Leu
                                                                                       Phe
                                                                                             Gln
                                Pro
 Leu
                                                                                       ctt
Leu
                   gtc
Val
                                      tgt
                                                                    cag
                                                                          ccg
                                                                                                   389
                                            cac
                                                   tca
 tgt
       CCC
                          ctc
                                CCC
                                     Cys
       Pro
             Lys
                         Leu
                               Pro
                                            His
                                                  Ser
                                                        Ser
                                                              Leu
                                                                          Pro
                                                                                 λsn
 Cys
              25
                                             30
                                                                           35
               2
 <210>
               37
 <211>
 <212>
              PRT
 <213>
               Paramecium sp.
<400>
                         Phe
5
                                                      Lys
10
Met Val
                               Ser
                                           Ser
                                                Phe
                                                                        Gly
                                     Leu
                                                 Lys
25
            Cys
                         Phe
                               Gln
                                     Cys
                                                                                            Ser
                   Lcu
     Cln
            Pro
                  Asn
·<210>
<211>
               11
<212>
               PRT
               Artificial Sequence
<213>
<220>
              Designed peptide based on size and polarity to act as a linker between the alpha and beta chains of Protein XYZ.
<223>
<400>
              3
                        Glu
                                                 Thr Glu Ile
Met Val
                 Leu
                              Pro Met His
<210>
```

<400>

3

tuentitiers and their accompanying information as shown in the following table. The numeric identifier shall be used only in the "Sequence Listing." The order and presentation of the items of information in the "Sequence Listing" shall conform to the arrangement given below. Each item of information shall begin on a new line and shall begin with the numeric identifier enclosed in angle brackets as shown. The submission of those items of information designated with an "M" is mandatory. The submission of those items of information designated with an "O" is optional. Numeric identifiers <110> through <170> shall only be set forth at the beginning of the "Sequence Listing." The following table illustrates the numeric identifiers.

Numeric Identifier	Definition	Comments and Format	Mandatory (M) or Optional (O)
<110>	Applicant	Preferably max. of 10 names; one name per line; preferable format: Surname, Other Names and/or Initials	M
<120>	Title of Invention		М
<130>	File Reference	Personal file reference	M when filed prior to assignment of appl. number
<140>	Current Applica- tion Number	Specify as: US 07/999,999 or PCT/US96/99999	M, if available
<141>	Current Filing Date	Specify as: yyyy-mm-dd	M, if available
<150>	Prior Application Number	Specify as: US 07/999,999 or PCT/US96/99999	M, if applicable include priority documents under 35 USC 119 and 120
<151>	Prior Application Filing Date	Specify as: yyyy-mm-dd	M, if applicable
<160>	Number of SEQ ID NOs	Count includes total number of SEQ ID NOs	M
<170>	Software	Name of software used— to create the Sequence Listing	0
<210>	SEQ ID NO:#:	Response shall be an integer representing the SEQ ID NO shown	M ~
<211>	Length	Respond with an integer expressing the number of bases or amino acid residues	М

<212>

Type

Whether presented sequence molecule is DNA, RNA, or PRT (protein). If a nucleotide sequence contains both DNA and RNA fragments, the type shall be "DNA." In addition, the combined DNA/ RNA molecule shall be further described in the <220> to <223> feature section.

м

0 9

<213> Organism

Scientific name, i.e. Genus/species, Unknown or Artificial Sequence. In addition, the "Unknown" or "Artificial Sequence" organisms shall be further described in the <220> to <223> feature section.

М

<220>

Feature

Leave blank after <220>. <221-223> provide for a description of points of biological significance in the sequence.

M, under the following conditions: if "n,"
"Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence; if ORGANISM is "Artificial Sequence" or "Unknown"; if molecule is combined DNA/RNA.

<221>

Name/Key

Provide appropriate identifier for feature, preferably from WIPO Standard ST.25 (1998), Appendix 2, Tables 5 and 6

M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence

<222>

Location

Specify location within sequence; where appropriate state number of first and last bases/amino acids

M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified

		•	•	_ (
		in feature .	base was used in a sequence	P
<223>	Other Infor- mation	Other relevant information; four lines maximum	M, under the fol- lowing conditions: if "n," "Xaa," or a modified or un- usual L-amino acid or modified base was used in a sequence; if ORGANISM	
	. \		is "Artificial Sequence" or "Unknown"; if molecule is com-	
and the second	• :	:	bined DNA/RNA.	:
<300>	Publication Information	Leave blank after <300>	•	
<301>	Authors	Preferably max of ten named authors of publication; specify one name per line; preferable format: Surname, Other Names and/or Initials	•	
<302>	Title	•	0 . ;	
<303>	Journal	· ··	0	
<304>	Volume	•	0	
<305> .	Issue	•	. 0	
<306>	Pages	•	0	
<307>	Date	Journal date on which data published; specify as yyyy-mm- dd, MMM-yyyy or Season-yyyy	o	
<308>	Database Accession Number	Accession number assigned by data-base including database name	o	. .
<309>	Database Entry Date	Date of entry in database; specify as yyyy-mm-dd or MMM-yyyy	o -	:
<310>	Patent Document Number ,	Document number; for patent-type citations only. Specify as, for example, US 07/999,999	0	

ferremone ion approximents - On rate: 43 Julie 1220

<311>	Patent Filing Date	Document filing date, for patent-type citations only; specify as yyyy-mm-dd	.0
<312>	Publication Date	Document publication date, for patent-type citations only; specify as yyyy-mm-dd	0
<313>	Relevant Residues	FROM (position) TO (position)	0
<400>	Sequence	SEQ ID NO should follow the numeric identifier and should appear on the line preceding the actual sequence	. M

5. Section 1.824 is revised to read as follows:

- 1.824 Form and format for nucleotide and/or amino acid sequence submissions in computer readable form.
- (a) The computer readable form required by 1.821(e) shall meet the following specifications:
- (1) The computer readable form shall contain a single "Sequence Listing" as either a diskette, series of diskettes, or other permissible media outlined in paragraph (c) of this section.
- (2) The "Sequence Listing" in paragraph (a) (1) of this section shall be submitted in American Standard Code for Information Interchange (ASCII) text. No other formats shall be allowed.
- (3) The computer readable form may be created by any means, such as word processors, nucleotide/amino acid sequence editors or other custom computer programs; however, it shall conform to all specifications detailed in this section.
- (4) File compression is acceptable when using diskette media, so long as the compressed file is in a self-extracting format that will decompress on one of the systems described in paragraph (b) of this section.
- (5) Page numbering shall not appear within the computer readable form version of the "Sequence Listing" file.
- (6) All computer readable forms shall have a label permanently affixed thereto on which has been hand-printed or typed: the name of the applicant, the title of the invention, the date on which the data were recorded on the computer readable form, the operating system used, a reference number, and an application serial number and filing date, if known.
- (b) Computer readable form submissions must meet these format requirements:
- (1) Computer: IBM PC/XT/AT, or compatibles, or Apple Macintosh;
- (2) Operating System: MS-DOS, Unix or Macintosh;